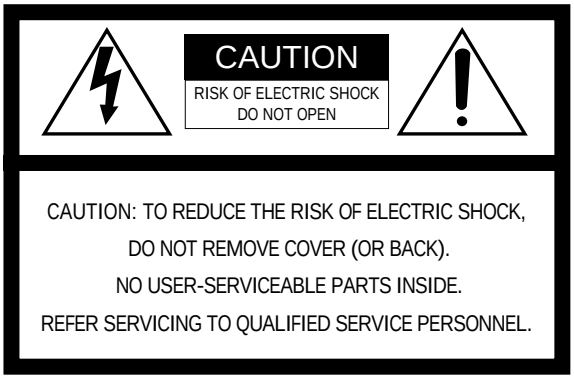
Panasonic

Instructions

Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

CPU Switch Unit

Model No. WJ-MPS850


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SA 1965

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices). Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

The serial number of this product may be found on the rear of the unit.
You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

WARNING:
To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

■ General

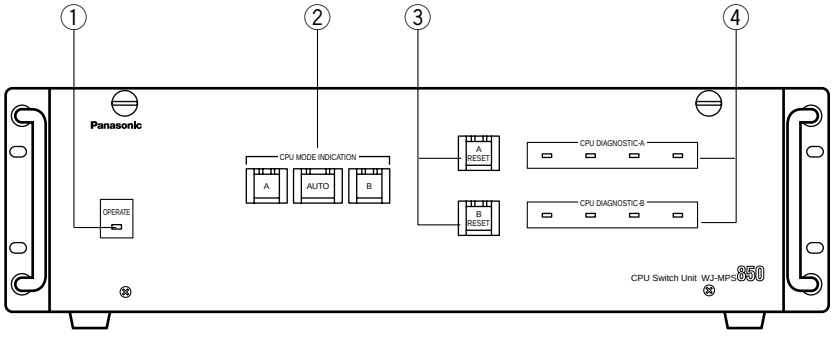
The CPU Switch Unit is designed to switch over the redundant (Duplicate) CPU system, automatically or manually for maintenance reasons. This unit will always diagnose both CPUs condition and judge which CPU must be active. Diagnostic tables and judgment logic are designed with flexible architecture which makes it possible to customize it, depending on the level of security requested by the user.

If this unit decides on a CPU change over, it must first deactivate the previous CPU, and wake up the standby CPU to be active later. Therefore this unit has a CPU reset function and can restart the CPU in the standby mode. Also, this unit will indicate the target CPU to be active or on standby. Even if this unit is defective or powered off, it can transmit the mode indications (the active mode or standby mode) to the CPU, because of the relay parts which are used for the interface with the CPU.

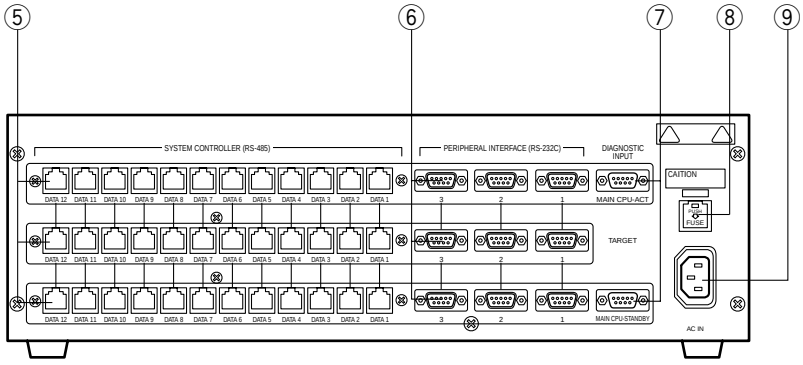
And this unit has a status display with LED indications, so a maintenance engineer will easily understand the CPU condition, which CPU is active, and etc.

■ Appearance

● Front View



● Rear View



① **Operate Indicator (OPERATE)**
Is on when the power of the WJ-MPS850 CPU Switch Unit is turned on.
Note: The power switch of the CPU Switch Unit is located underneath the front panel.
Remove the front panel by removing four screws on the panel.

② **CPU Mode Selector (A / AUTO / B)**
LEDs in the buttons indicate the selected mode of the CPU Switch Unit.
• A and B Buttons
On: Indicates the active mode is selected.
Off: Indicates the standby mode is selected.
• AUTO Button
On: Indicates the auto switching mode is selected.
Off: Indicates the manual switching mode is selected.

③ **Reset Buttons (A RESET, B RESET)**
Press these buttons when the CPUs reject control from the external unit.

④ **CPU Diagnostic Indicators (CPU DIAGNOSTIC)**
Lights to indicate that the self-diagnosis is being run.

⑤ **Controller Ports [SYSTEM CONTROLLER (RS-485)]**
These ports are provided for controlling the 850 System with the RS-485 system controllers. Up to 12 controllers can be connected with each CPU.

⑥ **Peripheral Interface Ports [PERIPHERAL INTERFACE (RS-232C)]**
These ports are reserved for future use or factory tests.

⑦ **Diagnostic Input Ports**
Receives inputs of the CPU status for self-diagnosis.

⑧ **Fuse Holder**

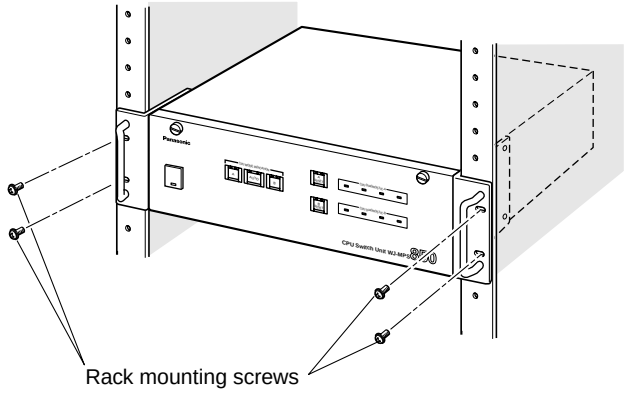
⑨ **AC Inlet Socket (AC IN)**
Plug the power cord (supplied as a standard accessory) into this socket and connect it to an AC outlet.

■ Mounting into a Rack

1. Remove the four rubber feet by removing four screws from the bottom of the CPU Switch Unit.

2. Install the CPU Switch Unit into the rack securing it with four screws (not included).

Cautions:
- Do not block the ventilation opening or slots on the cover to prevent the appliance from overheating.
  Always keep the temperature in the rack within 45°C (113°F).
- Secure the rear of the appliance to the rack by using the additional mounting brackets (procured locally) if the rack is subject to vibration.

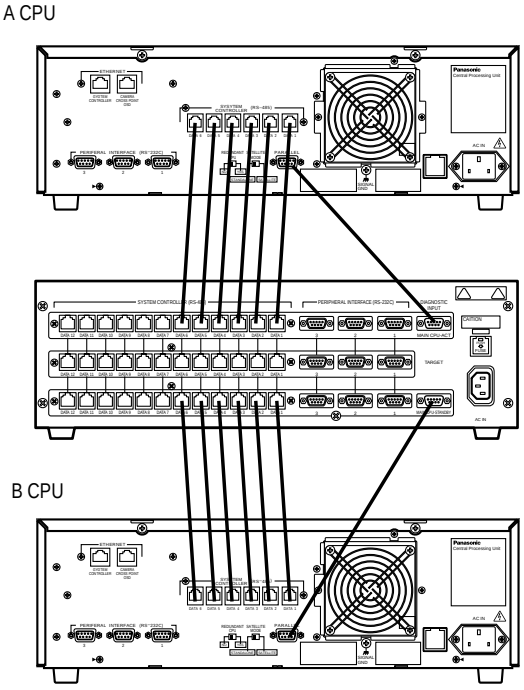


■ Connections

● Connection with the Main CPUs

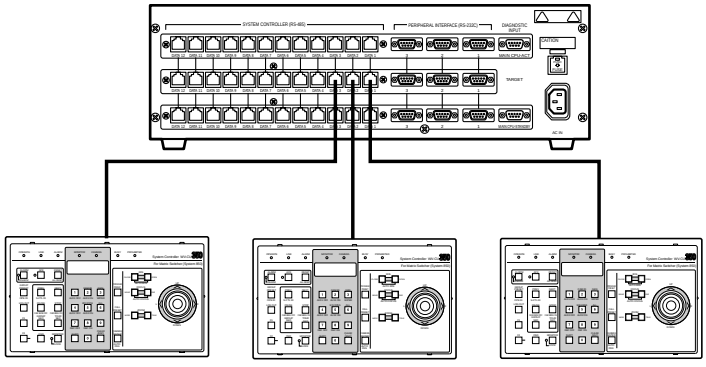
Connect with the Main CPUs A and B as shown in the figure.

- Connect RS-485 modular cables between controller ports (RS-485) of the CPUs and controller ports (RS-485) of this unit.
- Connect diagnostic cables between parallel ports of the CPUs and diagnostic input ports of this unit.
- Set the redundant CPU selector to YES on the rear of A and B CPUs.



● Connection with the RS-485 System Controllers

Connect with the RS-485 system controllers as shown in the figure.



■ Operations

Power on CPU Switch Unit first. The power switch of this unit is located underneath the front panel. Remove the front panel by removing the 4 screws on the panel.
The CPU Switch Unit has a default setting: the A CPU is the active CPU.
After powering on this unit, the "A" button will be on and the "B" button will be off automatically. It will also light the "AUTO" button to indicate that the auto-switching mode is selected.

Secondly, power on A CPU and B CPU. While the CPUs are booting, the diagnostic indicators on the front panel will be turned on. At this moment, A CPU is selected as the active CPU and B CPU is held at the standby mode.
If an error occurs in A CPU, the diagnostic indicators will turn off and A CPU will be reset. Then the "A" button will be off.

On the other hand, the CPU Switch Unit will switch, the B CPU as the active CPU.
The "B" button will be on and the "AUTO" button will be blinking. This blinking means that a CPU switch has occurred in the past days.
In the blinking mode, even if B CPU is corrupted and A CPU is good condition, this unit will judge to switch the active CPU from B CPU to A CPU. After checking the reason of the CPU switch and remove problems, please change the flashing mode to normal automatic mode by pressing the "AUTO" button. The manner of changing B to A is same as A to B.

Also this unit can be operated manually. Pull up the protection cover of the "AUTO" button and press "AUTO", it's LED will go off and it will change to manual mode. In manual mode, it is possible to select the active CPU manually by pressing the "A" button or "B" button. Also it is easy to change to the automatic mode by pressing the "AUTO" button in the LED on status.

Finally this unit has individual reset buttons for each CPU. By pressing the "A RESET" button, you can reset the A CPU, and by pressing "B RESET" button you can reset B CPU.
The "AUTO", "A", "B", "A RESET" and "B RESET" buttons are protected with a see-through cover.

■ Specifications

Power Supply:	120 V AC 60 Hz
Power Consumption:	11 W
System Controller Ports:	
RS-485;	6-conductor modular jack (x36)
Peripheral Interface Ports:	
RS-232C;	9-pin D-sub connector (x9)
Diagnostic Input Ports:	9-pin D-sub connector (x2)
Ambient Operating Temperature:	–10°C - +50°C (14°F - 122°F)
Ambient Operating Humidity:	Less than 90 %
Dimensions:	430 mm (W) x 132 mm (H) x 350 mm (D) 16-15/16” (W) x 5-3/16” (H) x 13-3/4” (D)
Weight:	11 kg (24.2 lbs)

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice.

■ Accessory

Power Cord ..... 1 pc.
RS-485 Modular Cable ..... 24 pcs.
Diagnostic Cable ..... 2 pcs.

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